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# Studies on constraints faced by the Gaushalas in Sangli and Kolhapur districts

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### Abstract
The present study conducted on "Studies on Management Practices Adopted by Gaushalas in Sangli and Kolhapur districts". Data were collected from 40 selected Gaushalas and grouped into 3 categories based on total number of animals as small (100 animals), medium (300 animals) and large (>300 animals), 13 Gaushalas in small whereas 15 Gaushalas medium and 12 Gaushalas in large category in Sangli and Kolhapur districts. About 37.50 percent of the Gaushalas possessed medium herd size (between 300 cattle), followed by 32.50 percent with small herd size (below 100 cattle) and 30.00 percent with large herd size (above 300 cattle). Gaushalas have also been identified as the centres for conservation of declining cattle breeds. It is noteworthy that the vast majority (100%) of Gaushala cattle compared to native cattle in general were found to be old and unproductive, which may have something to do with their main goal of caring for the elderly, sick, and unproductive cattle. The majority of the native animals kept in the Gaushalas were aged and unproductive small (32.28%), medium (49.44%), and large (36.66%) Gaushalas. Enough labor is necessary for the proper administration of Gaushala and the care of the cattle. For proper management of Gaushala and care of cattle, enough manpower is essential. The cattle's current feeding habits in the Gaushalas region of the research. It was noted that cattle in small, medium, and large Gaushalas were fed an average of 3-6 kg/day of dry fodder, 2.0-3.0 kg/day of green fodder, 0.2-0.5 kg/day of concentrate, and 50 gms of mineral mixture.

**Keywords:** Gaushalas, management practices, constraints, welfare

## Introduction
"Gaushala" refers to an establishment that was founded with the intention of housing, reproducing, raising, and caring for cattle in order to receive, care for, and treat sick, elderly, or infirm animals. Its main goal is to provide cows with a place to live, and it mainly serves the needs of weak, stray, non-lactating cattle. Yadav (2007) [8].

According to the 19th Livestock Census (2012), there are approximately 190 million cattle in India, of which 79% are native and the remaining 21% are hybrid or exotic. However, there has been an 8.94 percent decrease in the overall number of native cattle over the last five years (2012-19). The main causes of the decline in the number of cattle are mechanization in agriculture replacing draft power and unfeasible returns resulting from low productivity. Consequently, old, stray, and especially infertile cattle seek refuge in the gaushalas rather than in private homes. (Mandi, 2020) [4].

India's rural economy and way of life are centered around cattle, which have been domesticated for a very long time. Agriculture-based economies heavily rely on the breeding of cows. Enhancing the use of bull power for rural activities, producing young bulls, producing electricity, producing methane, liquified petroleum gas (LPG), and carbon dioxide from biogas production of Panchagavya medicines, vermicompost, and biopesticides for use in natural and organic agriculture are among the products produced by cows and bulls.

Most of the Gaushalas are being run by charity institution. Management personnel are having no scientific knowledge of management, feeding, breeding of animals etc. Manpower is inadequate almost in every Gaushalas. Most of the Gaushalas do not have grazing land and whenever it is available, the Gaushala management people have concept of only providing shelter and other aspects of improvement of cattle are totally neglected. Because of lack of technical knowledge, innovative modern knowledge are not being considered by the management personnels that is why even today old look of the Gaushalas have not changed.

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## Material and Methods
### Location
Maharashtra is the third-largest state in terms of land size, making up 9.36% of India's overall geographical area with a total area of 3,07,713 sq.km. The state is located between latitudes 15°35'N and 22°02'N and longitudes 72°36'E and 80°54'E. We chose the Gaushalas from the districts of Sangli and Kolhapur in the state of Maharashtra.

**The sources and collection of data:** The data for present investigation i.e. Management practices, constraints, profile of Gaushalas was recorded from 40 Gaushalas of the Sangli and Kolhapur districts. The data of Gaushalas was collected by actual questioning with respondents of Gaushalas.

**Compilation of data:** The information gathered on a certain criterion via interviewing Gaushala respondents with the use of a timetable. Forty Gaushalas were chosen at random for this study from the Maharashtra districts of Sangli and Kolhapur. The study's chosen Gaushalas were divided into three categories: small, or less than 100 cattle, medium, or between 100 and 300 cattle, and large, or more than 300 cattle. Thus, there were 13 small, 15 medium, and 12 large Gaushalas among the 40 Gaushalas that were selected. With the use of a well planned and practiced interview schedule, the selected Gaushala respondents were personally questioned in order to get pertinent data. Every one of the chosen Gaushalas provided the comprehensive data needed for the study in 2022-2023.

### Analysis of Data
Then, the data collected were tabulated and analysed using Garrett ranking technique to interpret the results.

### Result and Discussion
Constraints refer to the issues or challenges Gaushala management has encountered when implementing regular, humane animal husbandry and management techniques in their Gaushalas. The constraints were examined for the study in five areas. The research area's stakeholders rated the breeding, feeding, healthcare, institutional, and general management restrictions in Gaushalas. The data were gathered and analyzed using Garrett's ranking technique and the findings are displayed in Tables 1 to Table 5.

**Table 1:** Constraints faced by the Gaushalas in Housing practices

| Sl. No. | Constraints | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|---|
| | | Garrett Score | Rank | Garrett Score | Rank | Garrett Score | Rank |
| 1. | Less space (shade) | 73.84 | 1 | 72.00 | 1 | 71.25 | 1 |
| 2. | Less space (open) | 57.69 | 2 | 57.00 | 2 | 58.33 | 2 |
| 3. | Poor quality roofing material | 28.46 | 5 | 28.93 | 5 | 28.00 | 5 |
| 4. | Lack of cleanliness | 49.23 | 3 | 52.66 | 3 | 52.91 | 3 |
| 5. | Lack of provision of cooling summer | 40.92 | 4 | 38.40 | 4 | 38.50 | 4 |

In general, there were five important constraints expressed by the Gaushalas in adoption of Housing practices From the Table no 1.it could be inferred that, in small sized Gaushalas 'less space (shade)' was the first constraint since most of the small sized Gaushalas having less area of spacing. 'Less space (open)'was the second major constraint since most of them have problem of open space. 'Lack of cleanliness' was the third major constraint as very less attention was given towards sanitation and cleanliness by the Gaushala management. In the case of medium sized Gaushalas 'less space (shade)' was the first constraint, 'Less space (open)' was the second major constraint, 'Lack of cleanliness' was the third major constraint and in case of large sized Gaushalas same problem was found as compared to medium sized gaushalas.

**Table 2:** Constraints faced by the Gaushalas in breeding practices

| Sr. No. | Constraints | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|---|
| | | Garret Score | Rank | Garret Score | Rank | Garret Score | Rank |
| 1. | Inferior bulls used for Natural Service | 64.38 | 1 | 63.40 | 2 | 63.66 | 1 |
| 2. | Inadequate supply of Quality breed specific semen | 33.53 | 4 | 33.80 | 4 | 34.08 | 4 |
| 3. | Timely heat detection | 63.61 | 2 | 64.00 | 1 | 63.08 | 2 |
| 4. | Incidence of reproductive disorders in cattle | 39.46 | 3 | 39.8 | 3 | 40.16 | 3 |

In general, there were four important constraints expressed by the Gaushalas in adoption of breeding practices. From the Table 2 it could be inferred that, in small sized Gaushalas 'inferior bulls used for Natural Service' was the first constraint since most of the bulls in Gaushala herd maintained were old and inferior bulls. 'Inadequate supply of quality breed specific semen' was the fourth major constraint as very less attention was given towards quality of semen of the cattle by the Gaushalas management. 'Timely heat detection' was the second major constraint since most of them lacked awareness and experience to detect the heat symptoms. In the case of medium sized Gaushalas, 'problem of heat detection' was the first major constraint, 'Inadequate supply of quality breed specific semen' was the fourth. In the case of large sized Gaushalas, 'inferior bulls used for Natural Services' was the major constraints followed by 'Timely heat detection' was the second major constraint as there were poor detection of heat in Gaushalas.

**Table 3:** Constraints faced by the Gaushalas in feeding practices

| Sr. No. | Constraints | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|---|
| | | Garret Score | Rank | Garret Score | Rank | Garret Score | Rank |
| 1. | Inadequate supply of green fodder round the year | 63.46 | 1 | 55.00 | 3 | 55.00 | 3 |
| 2. | Non-availability of good quality concentrate feed | 60.38 | 2 | 64.66 | 1 | 64.58 | 1 |
| 3. | Low availability of dry fodder | 27.69 | 5 | 27.20 | 5 | 26.66 | 5 |
| 4. | Non-availability of land for fodder production / grazing | 37.84 | 4 | 38.80 | 4 | 39.00 | 4 |
| 5. | Inadequate knowledge on balanced feeding | 59.61 | 3 | 63.33 | 2 | 63.75 | 2 |

In general, there were mainly five important constraints expressed by the Gaushalas in adoption of feeding practices. The results in Table 3 indicate that, in small sized Gaushalas, 'non- availability of land for fodder production/grazing' was the fourth major constraint, as majority of the small and medium sized Gaushalas had less land holding so there was acute shortage for fodder/grazing land. 'Inadequate supply of green fodder round the year' was the first major constraint; which might be due to acute shortage of green fodder during the off season also majority of the small Gaushalas which are depending on local farmers for green fodder supply.

'Inadequate knowledge on balanced feeding' was the third major constraint, which might be due to lack of awareness about balanced feeding in cattle and knowledge of quality of local feed stuffs. In the case of medium size Gaushalas, 'non-availability of land for fodder production/grazing' was the fourth major constraints, 'inadequate supply of green fodder round the year' was the third and 'inadequate knowledge on balanced feeding' was the second major constraint. This is attributed to a lack of grazing and fodder land availability, the seasonality of green fodder supply, and a lack of awareness regarding a balanced feeding schedule for cattle.

**Table 4:** Constraints faced by the Gaushalas in healthcare practices

| Sr. No. | Constraints | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|---|
| | | Garret Score | Rank | Garret Score | Rank | Garret Score | Rank |
| 1. | Poor knowledge about cattle health management | 61.69 | 1 | 61.40 | 1 | 61.08 | 1 |
| 2. | Lack of timely access to veterinary services | 42.69 | 3 | 40.53 | 3 | 42.08 | 3 |
| 3. | Prevalence of poor environmental hygiene | 45.61 | 2 | 46.20 | 2 | 46.83 | 2 |

In general, there were mainly three important constraints expressed by the Gaushalas in adoption of healthcare practices. The results in Table 4 inferred that, in small sized Gaushalas, 'poor knowledge about cattle health management' was the first major constraint, followed by 'prevalence of poor environmental hygiene' and 'lack of timely access to veterinary services' was the third major constraint. This might be due to the ignorance and lack of experience among the small sized Gaushalas towards animal healthcare practices and also due to lack of timely access to veterinary services were the third major cause of the constraints.

In case of medium sized Gaushalas, 'poor knowledge about cattle health management' was the first major constraint. Followed by 'prevalence of poor environmental hygiene' and 'lack of timely access to veterinary services' was the third

constraints. This might be due to lack of access to veterinary services in the local Gaushalas and inadequate knowledge and awareness about good animal healthcare practices. Since, they followed indigenous method of treatment which was not effective in treating their cattle.

In the case of large sized Gaushalas, 'prevalence of poor environmental hygiene' was the second constraints followed by 'lack of timely access to veterinary services'. 'poor knowledge about cattle health management' was the first major constraints. This could be attributed to the distant location of veterinary clinics, ignorance and insufficient knowledge of good animal healthcare practices. Similar findings were observed by Gupta (2017) [2] and Mandi and Subhash (2020) [4].

**Table 5:** Constraints faced by the Gaushalas due to institutional constraints

| Sr. No. | Constraints | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|---|
| | | Garret Score | Rank | Garret Score | Rank | Garret Score | Rank |
| 1. | Difficulty in registration procedures | 33.53 | 4 | 33.80 | 4 | 34.08 | 4 |
| 2. | Inadequate infrastructure | 66.84 | 1 | 66.60 | 1 | 66.33 | 1 |
| 3. | Insufficient trained technical manpower | 37.46 | 3 | 36.06 | 3 | 36.91 | 3 |
| 4. | Inadequate credit facilities/ funds/ donations | 63.15 | 2 | 63.40 | 2 | 63.66 | 2 |

In general, there were mainly four important constraints due to institutional constraints. The results in Table 5 indicated that, in small sized Gaushalas, Inadequate infrastructure was the first major constraint as inadequate capital or fund for investment in Gaushala infrastructure development. 'inadequate credit facilities/funds/donations' was the second major constraint as it was time taking and cumbersome, 'insufficient trained technical manpower' was the third major constraint as majority of the manpower were daily labourers with less technical expertise. In the case of medium sized Gaushalas, 'inadequate infrastructure' was the first major

constraint as there was. 'Insufficient trained technical manpower' was the third major constraint. 'Difficulty in registration procedures' was the fourth major constraint. Whereas, in case of large sized Gaushalas 'insufficient trained technical manpower was the third constraints 'inadequate credit facilities/funds/ donations' and 'inadequate infrastructure' were the most important perceived constraints. Meena and Fulzele (2006) [5] carried out Constraints perceived by Meena tribes in adoption of improved dairy farming practices and lack of knowledge about proper amount of concentrate feeding.

**Table 6:** Constraints faced by the Gaushalas due to general constraints

| S. No. | Constraints | Small | | Medium | | Large | |
|---|---|---|---|---|---|---|---|
| | | Garret Score | Rank | Garret Score | Rank | Garret Score | Rank |
| 1. | Inadequate capital for infrastructure development | 65.53 | 2 | 65.80 | 2 | 66.50 | 2 |
| 2. | Inadequate knowledge of cattle waste management | 33.38 | 5 | 33.26 | 5 | 28.83 | 5 |
| 3. | High rate of calf mortality | 27.30 | 6 | 26.73 | 6 | 27.66 | 6 |
| 4. | Inadequate Government support for Training and development | 73.76 | 1 | 74.20 | 1 | 73.50 | 1 |
| 5. | High cost of inputs | 47.76 | 4 | 48.66 | 4 | 49.33 | 4 |
| 6. | Inadequate knowledge of scientific management | 52.23 | 3 | 51.33 | 3 | 50.66 | 3 |

In general, there were mainly six important general constraints faced by Gaushalas. The results in Table 6 indicated that, in small sized Gaushalas, 'inadequate capital for infrastructure development' was the second major constraint, 'high cost of inputs' was the fourth major constraint and 'inadequate Government incentives to support Gaushalas' was the first major constraint. In the case of medium size Gaushalas, 'inadequate capital for infrastructure development was the second major constraints', 'inadequate Government incentives to support Gaushalas was the first' and 'high price of inputs' was the fourth major constraints. This may be the result of the fact that most small and medium-sized Gaushalas lacked the financing sources necessary to provide the necessary infrastructural facilities. However, the same issues were discovered with the same preference in the case of large-sized. This might be because most small, medium, and big Gaushalas did not receive enough government funding for training and development. inadequate financial sources, which prevented them from having enough money to build infrastructural projects. Lack of technically qualified and skilled labor had an effect on Gaushalas' scientific management.

## Conclusion
The study on Gaushala management highlights critical constraints across housing, breeding, feeding, healthcare, institutional challenges, and general management practices. Key issues include inadequate space, poor quality of resources, insufficient knowledge on cattle care, and a lack of financial and institutional support. Addressing these requires a holistic approach that involves improving infrastructure, enhancing training and knowledge dissemination, and securing better support from government and private entities. Collaboration among stakeholders is crucial to uplift the standards of care and ensure the well-being of cattle in Gaushalas. Implementing targeted interventions to mitigate these constraints can significantly enhance the humane management and sustainability of Gaushalas, fostering better health and productivity among the cattle they shelter.

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